



Estonian Chemical Society

Annual Report to the EuCheMS

Division of Chemical Education for 2021-2022

1. Abstract

At science education (inc chemistry education) level in collaboration with Estonian Academy of Sciences and Horizon 2020 Twinning partners an international conference was organised. Educational committee was set up under the Estonian Academy of Sciences

An updated version of chemistry curriculum (syllabus) for general education was introduced

PhD position in chemistry education was opened in the Institute of Chemistry, University of Tartu

2. National Educational Policy

Chemistry is taught as a part of the compulsory education as separate discipline starting from grade 8 till grade 12. In grades 8 and 9 all schools follow the same curriculum, each year 2 periods in a week. At gymnasium level all students learn chemistry 3 periods. Special courses are included into the gymnasium programme accordingly to the stream. There is no final examination in chemistry. However Estonian Ministry of Education and Science has introduced an e testing in science which includes chemistry – students and teachers are getting formative feedback and guidelines for the further learning.

At university level, chemistry is taught in three Estonian universities as well as BSc as well as MSc level, gymnasium chemistry teachers are trained under the umbrella of science education programme in the Faculty of Science and Technology, grade 8 and 9 chemistry teachers might be trained under the several subject science teacher programme in the Institute of Education.

3. Events and activities in Chemistry education

- September, 30 2021 an International expert seminar: Impact of research in science education addressing the need for a knowledge-based society <https://www.akadeemia.ee/en/events/impact-of-research-in-science-education-addressing-the-need-for-a-knowledge-based-society/>

- Estonian Academy of Sciences established education committee to improve education in Estonia, the first meeting was targeting problems in science education (incl chemistry education)
- Estonian Chemistry Teachers Association developed zoom in service from teachers to teacher sharing the best practices during COVID 19
- An updated version of chemistry curriculum was introduced by the Estonian Ministry of Science and Education working party in May 2022
- Youth academy of University of Tartu keeps preparing students for international chemistry olympiade
- An E- testing system in Science education (incl chemistry) in continues development for grades 9 and 12- to give formative feed back to students and teachers
- PhD position in science education targeting chemistry education was opened in the Institute of Chemistry, University of Tartu under the co supervision of the professor from Weizmann Institute of Science
- Under the framework of Horisont 2020 project Sci Car in collaboration of Weizmann Institute of Science job shadow programme for the chemistry (and science) staff was launched
- Institute of Chemistry is continuously running high level international MOOC courses in analytical chemistry
- Estonian Chemistry Teachers annual meeting was postponed due to COVID from February 2022 to autumn 2022
- Science (incl chemistry) teachers CPD courses are provided by University of Tartu Centre for Science Education

4. International initiatives

- We are ready to host Eurovariety 2023 in Tartu
- Under Erasmus + project DECISION teaching and learning materials on “Promoting students’ key competences for making evidence-based decisions on controversial socio-scientific issues“ are in development process (4 international partners)

5. Publications

6. Contact

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